

ABSTRACT

A power supply device has capacitor unit (7) in which capacitors are interconnected in series, charging unit (8) for charging capacitor unit (7) at a constant current, detecting unit (6) for detecting voltage on the high potential side of each of the capacitors, determining unit (4) for determining the existence of an abnormality based on the voltage detected by detecting unit (6). The determining unit determines the abnormality when the difference between respective voltages on the high potential sides of some adjacent capacitors exceeds upper-limit voltage value V_a , when the difference is lower than lower-limit voltage value V_b , or when a voltage is negative.